

Work Order ID 68522

Thursday, April 14, 2011 1:24:34 PM



Page 1

Item ID: D2891-1

Accept



Setup Start



Revision ID:

Stop



Item Name: 2.25 Support

Start Date: 4/14/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 5/20/2011 Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan:

M

Date:

11-04-11

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2891

Rev A1

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

*amt 11/05/25**20**φ*

HAAS CNC vertical machine #1

Machine as per Folio FA046□Tumble & Deburr

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

*amt 11/05/25**20**φ*

Quality Control

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

*B.A 11/05/30**20**φ*

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



Powdercoat

White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel

0.00

Memo

START TIME:

11:30

□ OVEN TEMPERATURE:

Powder Coating

FINISH TIME:

12:00

20X ~~✓~~ m-f 4/06/01

140



QC

QC3- Inspect Part Finish

0.00

Memo

Quality Control

20 ~~✓~~ 4/06/01

150



Packaging

Identify as per dwg & Stock Location:

0.00

Memo

Packaging

x tube
any

0.00

20 ~~✓~~ 11-06-02 ~~20~~

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 3

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Item Name: 2.25 Support

Start Date: 4/14/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 5/20/2011 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/6/07

MF

11-06-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

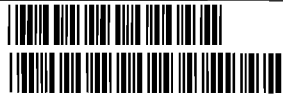
Thursday, April 14, 2011 1:24:41 PM

Page 1

Work Order ID: 68522

Parent Item: D2891-1

Parent Item Name: 2.25 Support



Start Date: 4/14/2011

Required Date: 5/20/2011

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP C 02.11.26 Added P/O KJ
IPP D 08.03.19 Re-format EC verified: DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
DSK076 		Manufactured	No			110	Each	4.0000	0.5	10			

D2891-1 TURNING DETAIL

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT060	4	
56038	4	

66882 x 10 → CMR 11/05/25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 68522
Description: Ø2.250 Support		Part Number: D2891-1
Inspection Dwg: D2891	Rev: A1	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article
 ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	0.188	0.193		.189	.189	.189	.189	.189
AB	0.240	0.260		.250	.250	.250	.250	.250
AC	0.115	0.150		.125	.125	.125	.125	.125
AD	0.040	0.060		.051	.049	.050	.050	.051
AE	0.010	0.020		.018	.018	.015	.015	.015
AF	0.240	0.260		.250	.250	.250	.250	.250
AG	0.290	0.310		.308	.306	.302	.302	.304
AH	0.115	0.150		.139	.138	.139	.139	.138
AI	0.454	0.474		.464	.464	.463	.463	.464
AJ	2.779	2.789		2.784	2.784	2.781	2.781	2.782
AK	0.240	0.260		.250	.250	.250	.250	.250
AL	1.002	1.042		1.036	1.038	1.037	1.036	1.036
AM	0.053	0.073		.063	.063	.063	.063	.063
AN	0.257	0.262		.262	.262	.262	.262	.262
AO	1.663	1.683		1.675	1.675	1.675	1.675	1.678
AP	0.053	0.073		.063	.063	.063	.063	.063
AQ	0.022	0.042		.032	.032	.032	.032	.032
AR								
AS								
AT								
Accept/Reject								

Measured by: AMK
 Date: 11/05/25

Audited by: H.A
 Date: 11/05/30

Prototype Approval: _____
 Date: _____

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	08.04.21	Reformat	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 68522
Description: Ø2.250 Support		Part Number: D2891-1
Inspection Dwg: D2891	Rev: A1	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	X6	X7	X8	X9	X10
HAAS Section								
AA	0.188	0.193		.189	.189	.189	.189	.189
AB	0.240	0.260		.250	.250	.250	.250	.250
AC	0.115	0.150		.125	.125	.125	.125	.125
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.010	0.020		.015	.015	.015	.015	.015
AF	0.240	0.260		.250	.250	.250	.250	.250
AG	0.290	0.310		.303	.303	.303	.305	.305
AH	0.115	0.150		.138	.138	.138	.137	.137
AI	0.454	0.474		.464	.461	.463	.464	.464
AJ	2.779	2.789		2.782	2.784	2.784	2.783	2.783
AK	0.240	0.260		.250	.250	.250	.250	.250
AL	1.002	1.042		1.035	1.038	1.038	1.036	1.038
AM	0.053	0.073		.063	.063	.063	.063	.063
AN	0.257	0.262		.262	.262	.262	.262	.262
AO	1.663	1.683		1.678	1.675	1.675	1.677	1.677
AP	0.053	0.073		.063	.063	.063	.063	.063
AQ	0.022	0.042		.032	.032	.032	.032	.032
AR								
AS								
AT								
Accept/Reject								

Measured by: *[Signature]* Date: 11/05/25

Audited by: *[Signature]* Date: 11/05/30

Prototype Approval: _____ Date: _____

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	08.04.21	Reformat	KJ/JLM	<i>[Signature]</i>

DART AEROSPACE LTD		Work Order: 68522
Description: Ø2.250 Support		Part Number: D2891-1
Inspection Dwg: D2891	Rev: A1	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1/	12	13	14	15
HAAS Section								
AA	0.188	0.193		.189	.189	.189	.189	.189
AB	0.240	0.260		.257	.257	.250	.250	.250
AC	0.115	0.150		.125	.125	.126	.126	.126
AD	0.040	0.060		.050	.050	.050	.050	.051
AE	0.010	0.020		.015	.015	.015	.015	.015
AF	0.240	0.260		.250	.250	.250	.250	.250
AG	0.290	0.310		.308	.307	.305	.305	.307
AH	0.115	0.150		.140	.137	.138	.139	.139
AI	0.454	0.474		.465	.465	.465	.465	.462
AJ	2.779	2.789		2.781	2.781	2.782	2.782	2.783
AK	0.240	0.260		.250	.250	.250	.250	.250
AL	1.002	1.042		1.035	1.037	1.036	1.036	1.037
AM	0.053	0.073		.063	.063	.063	.063	.063
AN	0.257	0.262		.262	.262	.262	.262	.262
AO	1.663	1.683		1.679	1.679	1.677	1.677	1.677
AP	0.053	0.073		.063	.063	.063	.063	.063
AQ	0.022	0.042		.032	.032	.032	.032	.032
AR								
AS								
AT								
Accept/Reject								

Measured by: CMK Date: 11/05/26

Audited by: MA Date: 11/05/30

Prototype Approval: _____ Date: _____

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	08.04.21	Reformat	KJ/JLM	

DART AEROSPACE LTD		Work Order: 68522
Description: Ø2.250 Support		Part Number: D2891-1
Inspection Dwg: D2891	Rev: A1	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	116	117	118	119	120
HAAS Section								
AA	0.188	0.193		.189	.189	.189	.189	.189
AB	0.240	0.260		.250	.251	.250	.250	.250
AC	0.115	0.150		.126	.126	.126	.126	.126
AD	0.040	0.060		.057	.057	.057	.050	.050
AE	0.010	0.020		.015	.015	.015	.015	.015
AF	0.240	0.260		.250	.250	.250	.250	.250
AG	0.290	0.310		.306	.304	.305	.303	.303
AH	0.115	0.150		.139	.137	.137	.137	.137
AI	0.454	0.474		.462	.461	.461	.463	.463
AJ	2.779	2.789		2.783	2.783	2.783	2.783	2.783
AK	0.240	0.260		.250	.250	.250	.250	.250
AL	1.002	1.042		1.037	1.038	1.038	1.038	1.038
AM	0.053	0.073		.063	.063	.063	.063	.063
AN	0.257	0.262		.262	.262	.262	.262	.262
AO	1.663	1.683		1.677	1.677	1.677	1.675	1.675
AP	0.053	0.073		.062	.063	.063	.063	.063
AQ	0.022	0.042		.032	.032	.032	.032	.032
AR								
AS								
AT								
Accept/Reject								

Measured by: *CME* Date: 11/05/26

Audited by: *B.A* Date: 11/05/30

Prototype Approval: Date:

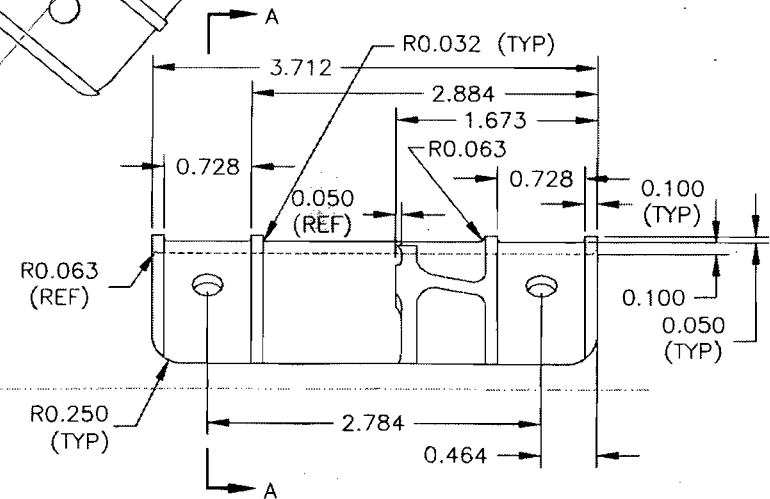
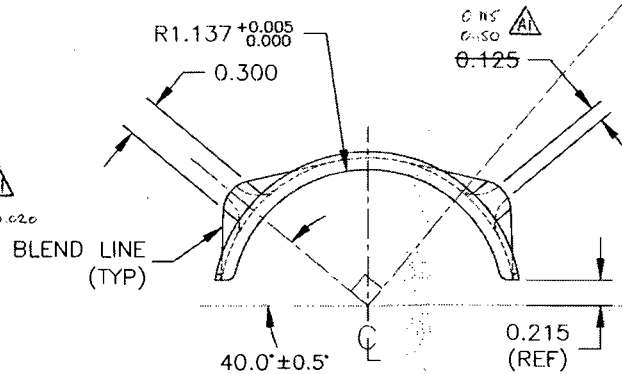
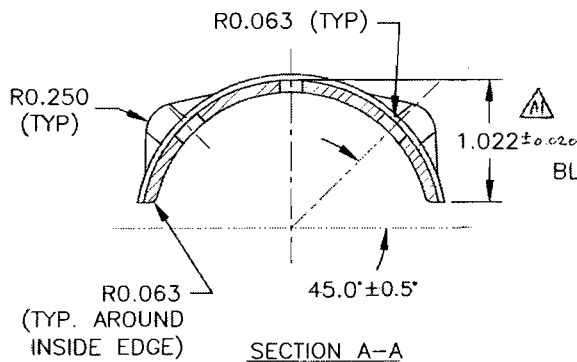
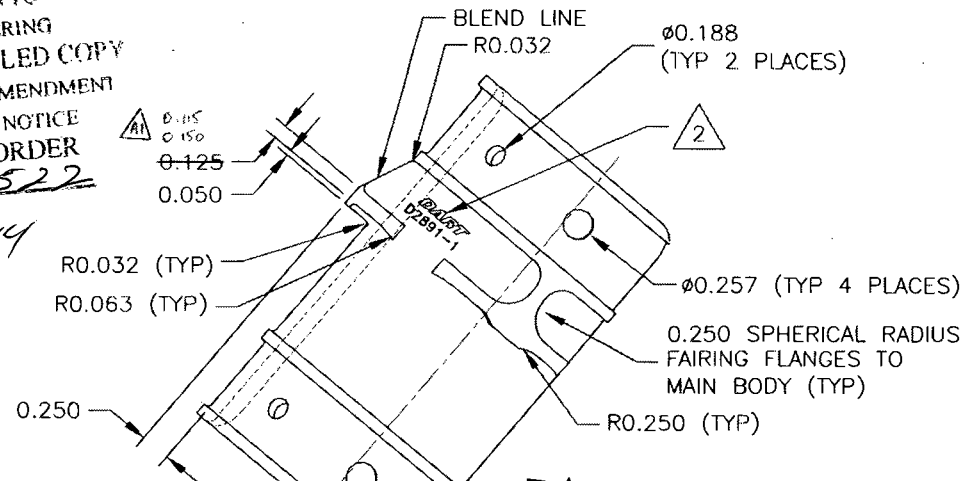
Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	08.04.21	Reformat	KJ/JLM	

D2891-1

- 1) MATERIAL: 17-4 PH STAINLESS STEEL
HEAT TREAT TO H900 CONDITION
(900°F FOR 1 HR, AIR COOL)
MIN UTS = 170 KSI (38 HRC)
- 2) IDENTIFY WITH DART LOGO (PER DART SUPPLIED GRAPHIC) AND PART NUMBER IN THIS AREA WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP.
- 3) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 (REF. X.XXX = ± 0.010) UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) FINISH: POWDER COAT WHITE (REF. 4.3.5.2) PER DART QSI 005 4.3

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 08522

011-04-14



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AI	#CP	02.01.23	UPDATING DIMS AS MANUFACTURED.
A		00.11.17	NEW ISSUE
DESIGN	CP	DRAWN BY	CP
CHECKED	#	APPROVED	#
DATE	00.11.17	DRAWING NO.	D2891
		TITLE	Ø2.250 SUPPORT
		REV. A	SHEET 1 OF 1
		SCALE	1:1

DART DART AEROSPACE LTD.
HAMPSHIRE, ONTARIO, CANADA

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries